Advisory Committees undertake intensive and extensive examination and monitoring. The Indo-US Vaccine Action Programme is monitored through a high powered Apex Committee. Safety guidelines have been evolved which have to be followed strictly for pursuing any project based on recombinant DNA technology. An Apex Committee in the Ministry Of Environment & Forests called the Genetic Engineering Approval Committee has fo approve any trial or introduction of genetically engineered products in the country.

**Genetic tech for higher silk yield**

2116. SHRIMATI MIR A DAS:
SHRI SOM PAL:
SHRI RAM AWADHESH SINGH:
SHRI CHIMANBHAI MEHTA:

Will the PRIME MINISTER be pleased to state:

(a) whether genetic tech for higher silk yield is researched and developed by the Indian Institute of Science, Ban galore; if so, the details thereof;

(b) whether it is a fact that the traditional silkworms are being injected with the genes which make worms sturdier give more silk and withstand disease and environmental vagaries better; and what are the details thereof; and

(c) what is the ranking of India in the World as the silk producing country?

THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRIMATI MARGARET ALVA): (a) and (b) Research has been initiated at the Indian Institute of Science, Bangalore in the direction of making transgenic silkworms with higher silk yield by the application of currently available methodologies of biotechnology.

Efforts to identify and isolate the gene(s) controlling stundiness, silk yield and disease resistance in silkworm have been initiated. So far effective methods for gene transfer into silkworm are also not available. The work is till in its initial stages of R&D and it will take some time before the same is standardized at the laboratory level.

(c) India is the second largest silk producing country in the world after China with 12,665 MT (1990-91).

**वैज्ञानिकों के लिए प्राचीन भारतीय विज्ञान की जानकारी रखना**

**2117. श्री कृष्ण लाल शर्मा :** क्या प्रधान मंत्री यह बताने की कृपा करेंगे कि :

(क) क्या तीन महीने से अधिक अवधि के लिये विदेश भेजे जाने वाले वैज्ञानिकों को प्राचीन भारतीय विज्ञान के इतिहास की जानकारी सुनिश्चित करने के लिये सरकार की कोई योजना है;

(ख) भारतीय विज्ञान के इतिहास पर इंडियन नेशनल साइंस तथा विज्ञान और प्रौद्योगिकी विभाग द्वारा किये गये कार्य का ब्यौरा क्या है ;

(ग) क्या किये गये कार्य तथा अनुसंधान संबंधी सामग्री देश के सभी प्रौद्योगिकी संबंधी संस्थाओं और विश्व विद्यालयों में उपलब्ध है; और

(घ) क्या विदेश जाने वाले वैज्ञानिकों के लिये कोई सघन पाठयक्रम आयोजित किया जाता है और क्या यह पाठयक्रम अनिवार्य होता है या नहीं ?

**कार्मिक, लोक शिकायत और पेंशन मंत्रालय में राज्य मंत्री (श्रीमती मारग्रेट अल्वा) :** (क) और (घ) जी हां । लम्बी अवधि के लिए विदेश जाने वाले भारतीय वैज्ञानिकों को प्राचीन भारतीय विज्ञान के संबंधित पहलुओं के बारे में जानकारी दी जाती है।

(ख) और (ग) भारतीय विज्ञान के इतिहास के बारे में कुछेक विशिष्ट

अध्ययन किए गए हैं। ये निम्नलिखित हैं :–

1. हिस्ट्री आफ साइंस एंड टैक्नोलोजी इन इनशिएन्ट इंडिया। ....थि बिगनिंग्स–लेखक देवी प्रसाद चट्टोपाध्याय –राष्ट्रीय विज्ञान प्रौद्योगिकी और विकास अध्ययन संस्थान, 1986

2. हिस्ट्री आफ साइंस एंड टैक्नोलोजी इन इनशिएन्ट इंडिया–2....फार्मेशन आफ थियोरेटिकल फंडामेंट्ल्स आफ नेचुरल साइंसेज–राष्ट्रीय विज्ञान प्रौद्योगिकी और विकास अध्ययन संस्थान, 1991

3. ए कन्साईज हिस्ट्री आफ साइंस इन इंडिया–लेखक बोस, सेन और सुब्बारयप्पा–भारतीय राष्ट्रीय विज्ञान अकादमी, 1971

4. साइंस एंड टैक्नोलोजी इन इंडिया लेखक ए. रहमान, राष्ट्रीय विज्ञान प्रौद्योगिकी और विकास अध्ययन संस्थान, 1991

ये दस्तावेज व्यापक रूप से बांटे जाते हैं और ये विभिन्न अनुसंधान संस्थानों में उपलब्ध हैं।

**Impact of Russia refusal on Indian space plans**

2118. SHRI V. NARAYANASAMY; Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that the scientists have said that the Russian refusal to Transfer rocket tecnology to India will not affect the Indian space plans; and

(b) if so, whether Government are preparing to have the indigenously processed technology?

THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRIMATI MARGARET ALVA); (a) and (b) Since Russia has assured their continued cooperation to enable ISRO to realise the launch of Geostationary Satellite Launch Vehicle (GSLV) in 1995 as per schedule the question does not arise.

**Impact of Russian refusal for rocket technology on Geostationai-y Satellite launch vehicle project**

2119. SHRl KRISHNA KUMAR BIRLA: Will the PRIME MINISTER be pleased 10 state:

(a) what is the likely impact on ths Geostationary Satellite Launch Vehicle (GSLV) Project with Russia's indecisive-ness to part with the rocket technology;

(b) what is the outcome of the negotiations held with Russia in this regard; and

(c) whether Government propose to ap proach other countries with advanced satellite launch power for the technolgy, if so, the decision, if any, taken in this direction?

THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRIMATI MARGARET ALVA); (a) and (h) There is no impact or GSLV project since Russia has assured their continued cooperation to enable Indian Space Research Organisation (ISRO) to realise the launch of GSLV in 1995 as per sche dule.

(c) No, Sir.

**Financial Assistance *to* U.P. to Improve Rishikesh-Badrinath-Kedaroath Road**

@2119-A. SHRI SHIV PRATAP MISHRA: Will the Minister of DEFENCE be pleased to state:

fa) whether Government have provided any financial assistance to the Governmeni of Uttar Pradesh to improve Rishikesh Badrinath-Kedarnath road, in view oi heavy pilgrims and tourists traffic to these areas; and

(b) if so, the details thereof?

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@Previously Unstarred Question 1907 transferred from the 13th May, 1992.